



PTO/SB/08a/b (07-05)

Approved for use through 07/31/2006. OMB 0851-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>			<b>Complete if Known</b>		
			Application Number	10/733,807-Conf. #8859	
			Filing Date	December 11, 2003	
			First Named Inventor	Paul R. McHugh	
			Art Unit	1742	
			Examiner Name	W. T. Leader Zheng	
Sheet	1	of	2	Attorney Docket Number	291958241US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
LZ		US-60/476,786		Davis et al.	
LZ		US-60/476,881		Hanson	
LZ		US-60/484,603		Wilson et al.	
LZ		US-60/484,604		Wilson et al.	
LZ		US-2001-0052465-A1	07-01-2003	Dordi et al.	
LZ		US-2002-0000380-A1	01-03-2002	Graham et al.	
LZ		US-2002-0088708-A1	07-11-2002	Yasuhiko Sakaki	
LZ		US-2003-0221953-A1	12-04-2003	Thomas Oberltnr	
LZ		US-2005-0000817-A1	01-06-2005	McHugh et al.	
LZ		US-2005-0006241-A1	01-13-2005	McHugh et al.	
LZ		US-3,652,442	03-28-1972	Powers et al.	
LZ		US-4,648,774	03-10-1987	Dorumsgaard et al.	
LZ		US-5,284,554	02-08-1994	Datta et al.	
LZ		US-5,312,532	05-17-1994	Andricacos et al.	
LZ		US-5,344,491	09-06-1994	Katou	
LZ		US-5,421,987	06-06-1995	Tzanavaras et al.	
LZ		US-5,431,421	07-11-1995	Thompson et al.	
LZ		US-5,476,577	12-19-1995	May et al.	
LZ		US-5,486,282	01-23-1996	Datta et al.	
LZ		US-5,516,412	05-14-1996	Andricacos et al.	
LZ		US-5,536,388	07-16-1996	Dinan et al.	
LZ		US-5,543,032	08-06-1996	Datta et al.	
LZ		US-5,567,300	10-22-1996	Datta et al.	
LZ		US-5,683,564	11-04-1997	Reynolds	
LZ		US-5,865,984	02-02-1999	Corbin, Jr. et al.	
LZ		US-5,925,226	07-20-1999	Hurwitt et al.	
LZ		US-6,001,235	12-14-1999	Arken et al.	
LZ		US-6,103,096	08-15-2000	Datta et al.	
LZ		US-6,168,695	01-02-2001	Woodruff	
LZ		US-6,181,057	01-30-2001	Inoue et al.	
LZ		US-6,228,231	05-08-2001	Uzoh	
LZ		US-6,251,250	06-26-2001	Keigler	
LZ		US-6,379,511	04-30-2002	Fatula et al.	
LZ		US-6,454,918	09-24-2002	Sakaki	
LZ		US-6,482,300-A1	11-19-2002	Sakaki	
LZ		US-6,547,937	04-15-2003	Oberltnr et al.	
LZ		US-6,635,157	10-21-2003	Dordi et al.	
LZ		US-6,660,137-A1	12-09-2003	Wilson et al.	
LZ		US-6,672,820	01-06-2004	Hanson	

Examiner Signature	/Lois Zheng/	Date Considered	01/18/2007
--------------------	--------------	-----------------	------------

Substitute for form 1449A/B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/733,807-Conf. #8859
				Filing Date	December 11, 2003
				First Named Inventor	Paul R. McHugh
				Art Unit	1742
				Examiner Name	W. T. Leader
Sheet	2	of	2	Attorney Docket Number	291958241US

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>2</sup> -Number <sup>3</sup> -Kind Code <sup>5</sup> (if known)				
LZ		EP-0 343 502 A2	11-29-1989	Lam Research Corp.		
LZ		EP-0 726 698 A2	08-14-1996	International Business Machines Corp		
LZ		JP-62-297494	12-24-1987	Electroplating Eng of Japan Co		
LZ		JP-62-297495	12-24-1987	Electroplating Eng of Japan Co		
LZ		JP-1-120827	05-12-1989	Mitsubishi Electric Corp		
LZ		JP-5-175158	07-13-1993	Fujitsu Ltd. et al.		
LZ		JP-06-260468	09-16-1994	Tokuyama		
LZ		JP-7-211724	08-11-1995	Casio Computer Co. Ltd		
LZ		JP-7-284738	10-31-1995	Toppa Printing Co. Ltd.		
LZ		JP-09089067	03-31-1997	Koganei Corp.		
LZ		JP-10-172974	06-26-1998	Denso Corp.		
LZ		JP-11-092993	04-06-1999	TDK Corp		
LZ		JP-2000-17480	01-18-2000	Fujitsu Ltd.		
LZ		JP-2001-64795	03-13-2001	Electroplating Eng of Japan Co		
LZ		WO-01/50505-A3	07-12-2001	Semitool, Inc.		
LZ		WO-04/110698-A2	12-23-2004	Semitool, Inc.		
LZ		WO-05/042804-A2	05-12-2005	Nexx Systems, Inc.		
LZ		WO-99/25004	05-20-1999	Applied Materials, Inc.		

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \* CITE NO.: Those application(s) which are marked with a single asterisk (\*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
LZ		WU, Z.L. et al., "Methods for Characterization of Mass Transfer Boundary layer in an industrial Semiconductor Wafer Plating Cell," Abs. 165, 205 <sup>th</sup> Meeting, © The Electrochemical Society, Inc., 2004 (1 Page).	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature	/Lois Zheng/	Date Considered	01/18/2007
-----------------------	--------------	--------------------	------------



Express Mail No. EV915639253US

PTO/SB/08a/b (07-05)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<b>Substitute for form 1449A/B/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/733,807-Conf. #8859
				Filing Date	December 11, 2003
				First Named Inventor	Paul R. McHugh
				Art Unit	1742
				Examiner Name	W. T. Leader
Sheet	1	of	1	Attorney Docket Number	291958241US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
LZ		US-20010032788-A1	10-25-2001	Woodruff et al.	
LZ		US-4,749,601	06-07-1988	Hillinger	
LZ		US-6,136,163	10-24-2000	Cheung et al.	
LZ		US-6,214,193	04-10-2001	JONATHAN D. REID	
LZ		US-6,231,743	05-15-2001	GREGORY S. ETHERINGTON	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>4</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	MM-DD-YYYY			

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \* CITE NO.: Those application(s) which are marked with an asterisk (\*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T <sup>2</sup>
LZ		TACKEN, R.A. et al., "Applications of Magnetoelectrolysis", Journal of Applied Electrochemistry, 1995 (no month), Vol. 25, pages 1-5			
LZ		International Search Report for PCT/USO4/17670; Mailed June 22, 2006; Applicant: Semitool, Inc. (19 pages)			

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature	/Lois Zheng/	Date Considered	01/18/2007
-----------------------	--------------	--------------------	------------



Express Mail No. EV881813381US

PTO/SB/08a/b (07-06)

Approved for use through 09/30/2008. OMB 0851-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<b>Substitute for form 1449A/B/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)			<b>Complete if Known</b>		
			Application Number	10/733,807-Conf. #8859	
			Filing Date	December 11, 2003	
			First Named Inventor	Paul R. McHugh	
			Art Unit	1742	
			Examiner Name	W. T. Leader	
Sheet	1	of	1	Attorney Docket Number	291958241US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
LZ		US-5,000,827	03-19-1991	VIRGIL E. SCHUSTER	
LZ		US-5,222,310	06-29-1993	Thompson et al.	
LZ		US-5,230,743	07-27-1993	Thompson et al.	
LZ		US-5,344,539	09-06-1994	Shinogi et al.	
LZ		US-5,531,874	07-02-1996	DENIS J. BROPHY	
LZ		US-5,614,076	03-25-1997	DENIS J. BROPHY	
LZ		US-5,635,157	06-03-1997	Mease et al.	
LZ		US-5,762,751	06-09-1998	MARTIN C. BLECK	
LZ		US-6,024,856	02-15-2000	Haydu et al.	
LZ		US-6,037,790	03-14-2000	THOMAS EDWARD DINAN	
LZ		US-6,048,154	04-11-2000	Wylman	
LZ		US-6,082,948	07-04-2000	Fishkin et al.	
LZ		US-6,132,586	10-17-2000	Adams et al.	
LZ		US-6,197,182	03-06-2001	Kaufman et al.	
LZ		US-6,328,872	12-11-2001	HOMAYOUN TALIEH	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \* CITE NO.: Those application(s) which are marked with an single asterisk (\*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature	/Lois Zheng/	Date Considered	01/18/2007
-----------------------	--------------	--------------------	------------